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THE CONCENTRATION OF RAILWAY CONTROL.

Not only in America but wherever the adoption of the system of private ownership has afforded opportunity for the action of similar economic forces, a single tendency has invariably dominated the history of railway development. The industrial conditions of the years that witnessed the construction of the earlier steam railways warranted only short and cheaply constructed lines and the limited financial resources of that period would have been inadequate for the creation of more extensive systems. As industry developed and growing accumulations of capital permitted the utilization on a larger scale of the indirect and less laborious methods of production involving enhanced dependence upon transportation, the numerous short and separate lines were extended until connections among them became more numerous. Then it became evident that their independence constituted a material limitation of their efficiency. Although this truth is more readily recognized when the statement is applied solely to the special conditions that characterized the earliest period of American railway history, a rigid scrutiny of the industrial relations of any period will afford ample proof of the fact that at no time has the American railway system been sufficiently homogeneous in its organization to render the most efficient service possible.

The existence of many independent corporate units each exercising control over a portion of a system, has at all times produced friction that has impaired efficiency. Under these conditions the pressure of industrial requirements has steadily worked toward the correction of the difficulties growing out of the separate and independent control of railway facilities, and has established the continuous tendency toward the concentration of control that is the dominating factor in railway history. If industrial conditions had remained stationary for any considerable length of time, it is

probable that the process of concentrating railway control would, not long after the beginning of the stationary period, have caught up with the necessities of industry in general and it would now be possible to point to a time at which the degree of railway homogeneity was sufficient to permit the highest possible efficiency of the facilities then in existence. But industrial association in the United States has continually increased in complexity, capital has been accumulated with progressively increasing rapidity, indirect methods of production have been called upon to supply a constantly multiplying proportion of the complex of commodities necessary for subsistence, and under these conditions separate control of different portions of the American railway system has always constituted a barrier to its highest utilization.

The present inquiry has nothing to do with the legal history of railway corporations, except as the degree of facility with which the operations among them essential to the inauguration of common control could, from time to time and in different jurisdictions, be accomplished, may have influenced the rate of progress of the purely economic movement. The consolidation of the previously separate control of different portions of the railway system may or may not be accompanied by the consolidation of the owning corporations. It has often been accomplished without the surrender of any of the outward and formal incidents of legal corporate independence, and there may be any degree of such surrender, from the slightest to the actual merger of one or more corporations into one previously existing or specially created to serve the purposes of the consolidation. After suggesting the various conditions from which centralized control of formerly separate railway properties results, it will be desirable briefly to explain the changes in legal status that usually accompany them.

The unions of connecting lines constitute the earliest type of railway consolidations. Most of the great trunk

lines now in existence were built up by such consolidations, only a very few of them having been originally planned and constructed for the extensive services to the performance of which they have now attained. The difficulties of separate control are not, however, by any means restricted to connecting lines. Before the history of American railways had covered a score of years the existence of rival lines connecting the same regions, and offering to perform the same services, had proved to be a source of industrial friction. The absence of any effectively established minimum limit to charges for particular railway services, and the fact that even closely parallel lines touch each other at relatively few points, render competitive bidding for that portion of railway traffic for which two or more routes are available destructive alike to railway revenues and to industrial stability. Such competition is the cause of unjust discrimination and of arbitrary exactions from local or non-competitive traffic, fatal not only to the development of the communities unfavorably located, but also to the symmetrical growth of industry in general. To avoid evils of this character many consolidations of a second type, illustrated by that of the New York Central and the West Shore, have been effected, in order to unite the control of lines substantially parallel.

Difficulties of the same kind as those which have impelled the consolidation of the so-called parallel lines have also led to unions among railways connecting common markets with different sources of supply of the same or competing commodities. This third type belongs to a later period, and has been effected usually by legal methods that render the application of the term "consolidation" to the results less satisfactory than in connection with the earlier types. Recent operations among certain of the anthracite carrying railways are illustrative of this latest phase of the tendency under discussion.

These earlier consolidations were made by merging one

franchise in that of a corporation owning one of the properties consolidated or by creating a new company. In other instances the control of separate lines has been combined by the purchase of a majority of the voting securities of one corporation by another or by leases for long terms of years or in perpetuity. In such cases the purchasing or leasing corporation has sometimes been one previously controlling one of the consolidated lines and sometimes has been newly created. Another method followed extensively during the last three or four decades, and one that in no way diminishes the formal independence of the corporations exercising immediate control, is the purchase by the same individual or compact group of individuals of dominating interests in the bodies owning the facilities whose ultimate control was to be united. In most instances these compact groups have consisted of persons allied by many common business interests, syndicates specially organized to effect such control, or the clients of prominent banking houses. In comparatively rare instances the groups themselves have been given formal corporate organization. The latter method has been adopted in the case of the Northern Securities Company which is now taking over the control of the great Northern and Northern Pacific railways.

In considering the various conditions and types of physical and corporate union it has seemed convenient to make use of the words "late" and "early," but it should not be inferred that there has been a distinct succession such as those terms might suggest or that the history of railway development can be divided into sharply defined periods characterized by the different types of union described. The order suggested is regarded as logical and helpful and will be found to be roughly historical, but instances of all of the different types of consolidation could be selected from among the incidents of recent years.

Progressive railway development, continuously characterized by a tendency toward the centralization of con-

trol, and with the expression of this tendency pretty closely limited to the forms already discussed naturally led to the creation of extensive systems dominated by men of great power in the industrial and financial world. The character of the evolutionary process through which these systems had been developed prevented territorial exclusiveness, and therefore while the industrial demand for common control continued with unabated force, the time came when the conditions of railway organization met this demand with greatly increased resistance. The terms of further centralization, if it were to be effected on a scale adequate to satisfy the necessities of commerce and industry, had then to be negotiated between corporations possessed of enormous resources and by individuals determined jealously to guard their own industrial supremacy, and strenuous in their efforts to preserve unimpaired their dominating influence in the transportation world. The year 1870 may be used approximately to indicate the time when American railway development apparently reached the stage, at least in the east, at which further complete unions of important rival lines, under the conditions then in existence became substantially impracticable. The rivalries of the New York Central, Pennsylvania, Erie, and Baltimore & Ohio in the decade and a half that began with 1870 certainly contained no less of the evils that demand correction through the institution of common control than any earlier railway contests for traffic, but the personal rivalries of the Vanderbilts, Scotts, Goulds and Garretts, and the domineering dispositions of these great captains of industry made union on terms on which some of them must become subordinate wholly impracticable.

Nor have the difficulties of this kind been wholly personal. The growth of corporations in magnitude and stability has been accompanied by the multiplication of securities of different grades, the relative values of which must satisfactorily be brought to a common denominator in any scheme of cor-

porate consolidation. There has also been a diffusion of the ownership of these securities that has multiplied the difficulty of securing the general acceptance of such a denominator. Diffused ownership very greatly increases the inertia to be overcome, by adding to those who must be convinced of the desirability of the change, a large number of persons who are less thoroughly informed concerning the conditions of the industry than the smaller number formerly in control. Shortly after 1870 unfavorable economic conditions led the public of a large portion of the country into a condition of dissatisfaction with railway methods and resulted in general hostility to further consolidation. Although this sentiment found expression in many laws prohibiting consolidations, it was little if any more effective on that account, for such laws have rarely proved adequate to prevent the consummation of arrangements deemed really necessary, but it was a genuinely deterrent force, because of the proper deference of railway managers to general public sentiment.

Thus about 1870 the leaders of the railway world began an exhaustive search for some means of securing the benefits of centralized control, which could be utilized without encountering the obstacles that then began to impede actual consolidation. The direction in which such means must be sought was plainly indicated by the character of the evils which were then most strongly demanding the remedy of unified control. The demoralization in rates, which grew out of the competition of rival routes offering to perform the same services, resulted in an unstable condition of railway earnings and in many unjust discriminations among persons, places and articles of traffic. If rates could be controlled and systematized, by agreements among separate railways, the principal object of consolidation could be attained without the necessity of yielding independence in other matters. Agreements in regard to the rates to be applied to traffic for which two or more routes were available therefore became

common. It was found, however, that in practice they were frequently violated by lines which saw the possibility of diverting traffic from their rivals and thus increasing the volume of their business. In order to remove the incentive for this the device of distributing such traffic in proportions fixed by agreement was evolved, and under the popular name of "pooling" it developed so rapidly from its commencement in 1870 that when it was made illegal, in 1887, by the fifth section of the Interstate Commerce law, it was the most prominent feature of American railway administration.

The Interstate Commerce law itself may properly be regarded as a step, and that a long one, in the direction of the centralization of railway control. It is by no means an harmonious statute, and it contains elements radically opposed to each other, but its distinctive feature is the requirement that rates shall be relatively reasonable. In other respects this law did nothing more than to declare the policy of the Common Law, that rates should be absolutely reasonable and to provide rules and machinery for enforcing this and the first-named requirement. Its only novel and essential principle is the requirement of relative reasonableness, and this means essentially that all rates shall be subjected to measurement by common definite standards. Obviously this is a result that can only be accomplished through ultimate centralized control or authority to review and correct the acts of those in immediate control. The creation of the Interstate Commerce Commission, and its endowment with authority to order the revision of rates that it should find to be inequitably adjusted, was an important advance toward the general systematization of American railway facilities. That the enforcement of the orders of the Commission, by the legal processes provided in the law, has been less successful than Congress may have intended in 1887, and that its decrees have needed the sanction of public sentiment in order to become effective, does not at all modify the force of this conclusion.

In spite of the fact that harmonious action by the officers of so-called competing railways is a prerequisite absolutely necessary to the successful enforcement of the central principle of the Interstate Commerce law, that statute made illegal the one device that had been found by practical experiment to make such action possible. Agreements for the division of freight or freight revenue were made illegal, and thus the best substitute for actual consolidation that the ingenuity of railway administrators had been able to devise was effectually destroyed. Efforts were made by railroad officials to provide incentives to the observance of rate agreements and railway associations, although less effective than when they included pooling arrangements, were a very prominent and helpful feature of railway administration for many years after the enactment of the Interstate Commerce law. Later, however, probably to the surprise of most of the supporters of the Sherman anti-trust law the Supreme Court of the United States interpreted that statute so as to make it applicable to railways, and held that it prohibited all agreements for the maintenance of rates, even including instances in which these were both absolutely and relatively reasonable and just. One consequence of this decision was finally to compel recurrence to the more direct devices for securing centralized control that had characterized the earlier decades of railway history. Actual consolidation did not cease between 1870 and 1897, but the progress of the tendency in that direction was slower than it had been on account of the obstacles referred to and the relief afforded by the substitute just described. When resort to these substitutes was made impossible the tendency naturally began to press harder for expression in the earlier form. At about the same time very extraordinary industrial conditions at home and abroad produced unprecedented domestic prosperity, and placed in the hands of American investors an immense fund of ready capital. This greatly facilitated the financial operations connected with railway consolidations,

and was also to some extent an incentive to undertake them as a means of marketing securities.

The term "community of interest" was originally applied to a device for promoting harmonious action that must now be looked upon much as a makeshift of but temporary utility. Properly this term is used only to designate those instances in which one railway corporation becomes the owner of a block, less than a majority, of the voting securities of another and thereby obtains a voice, but not the controlling voice, in the management of the latter, or in which an individual or compact group of individuals having control of one railway becomes so interested in another. The phrase was promptly taken up by the public and the newspapers and has now come to be applied to nearly every device of common ownership short of actual consolidation. More recently still it has passed into the daily jargon of the bulls and bears of Wall street, where it has lost whatever significance it had previously retained.

The actual consolidation of railway properties has never gone on more rapidly than during the year 1901. The absorption by their former rivals of such properties as the Baltimore & Ohio, Southern Pacific and Chicago, Burlington & Quincy, would be notable if occurring singly and on widely separated dates, but all these and other great lines have passed, within a few months, into the control of formerly competing lines.

So much must be said, in discussing the causes of consolidation, of the superior services rendered after it has taken place and of the relation of separate control to unjust discrimination that the argument might so far be misconceived as to leave the impression that the writer has assumed that other than purely business motives have actuated those who have planned and executed the various steps in the process of railway unification. No such assumption is intended. Those in charge of railway facilities have perceived opportunities for personal gain to be achieved through uniting sepa-

rate properties. The incentive has been such as would appeal to the theoretical "economic man," and in few other departments of industrial activity has any process been as little impeded by extra-economic considerations. It would be grossly incorrect, however, to regard this as equivalent to the statement that consolidation has permitted higher rates or a higher proportionate return to the capital invested. Indeed it is substantially certain that the average return upon railway capital has been reduced by railway concentration below the point at which it would have remained had the tendency in that direction been arbitrarily overcome or even very materially retarded in its operation. So long as a country demands continuous additions to its railway facilities, or the progressive improvement of those in existence, and is therefore calling for new investments of capital in railway enterprises, it is quite certain that the average return to such capital must bear an acceptable relation to the average return from other investments, and that the rate that will be accepted must be dependent in a very large degree upon the amount of risk involved.

The writer believes that in the United States there has been a deceptive attractiveness in railway investments which has arisen from an almost invariably baseless hope of extraordinary returns, and that this has resulted in excessive investments in the transportation field with a consequent reduction of the average yield to capital considerably below the average of industries of actually greater stability. Land grants and local subsidies had much to do with the establishment of this condition, if it really exists, and it must also be based upon the enthusiasm of the early railway *entrepreneurs*, especially of those who after securing investments were unscrupulous enough to derive personal profits in the manipulation of the securities of the lines they had promoted. The existence of this condition is by no means fundamental to the present discussion, however interesting a side-light it may throw upon it, and

the truth or falsity of the writer's assumption in this particular would in no way modify the principle that the return to railway capital must be materially affected by the risk assumed. Capital prefers the substantial certainty of a small and definite return to the possibility of a high gain with the alternative of actual loss. In the degree that uncertainty is eliminated an industry becomes the field of investment as distinguished from adventuring. The former demands small returns, the latter large.

No extensive railway enjoys the privilege of monopoly gains. The appearance of monopoly in this industry is deceptive and untrustworthy. With the exception of travel for pleasure, which furnishes but an insignificant proportion of the total railway traffic, the services rendered by railways are to be defined as the production of a complementary commodity or one which is of no utility except in connection with some other commodity. In other words, railways take utilities of form and add to them utilities of place—the sums being utilities available to consumers. But as most utilities of form can be produced in many places while in many instances one kind may be substituted for another, the circumstances under which railways can exact arbitrary charges for their services are exceedingly rare. Under the more usual circumstances the impulse to produce the largest marketable volume results in progressive reductions in the rates of charge which, having no limitation arising from a known or discoverable cost of production of specific services are only checked by reaching a point beyond which they will not secure additional traffic, or by the ultimate realization that total revenue is below the amount necessary to pay expenses of operation and the minimum return that will be accepted by investors. The regular alternation of periods of high industrial prosperity and great activity with those of depression and closely restricted production is also a factor in the reduction of the return to the investors in railway enterprises. Rates being once adjusted

to a period of great activity, naturally accompanied by a great volume of traffic, the subsequent period of comparative stagnation is certain very materially to reduce the aggregate of the revenue which they produce. But at such times commercial conditions and public sentiment forbid any increase. With recurrent prosperity, however, further reductions are usually made and thus the process goes on indefinitely repeating itself. The absence of a cost of production limit to specific rates and the existence of the downward tendency resulting from the forces just described, cause the possible profits on the small portion of traffic on which arbitrary rates could be collected to be absorbed by reductions on the larger portion.

The consequences accruing to the owners of railway property from the concentration of railway control, are therefore greater stability in their investments and a lower rate of return upon their capital. That these results would ensue has not, of course, always been perceived in advance by those who have effected consolidations, nor is the substantial certainty that they will occur yet unanimously recognized by practical railway men. The latter have often hoped to realize high profits through the economies possible under consolidated management, and to share largely in the pecuniary results of the higher efficiency so secured. In spite, however, of these alluring anticipations it would be impossible to point to an illustration, on a significant scale, of a union of separate lines in which the consequences have not been as described. The very important gain to the public in the elimination, under unified control, of unjust discrimination, is really a part of the gain in efficiency, and is mainly to be measured by the growth of the communities after the incubus of injustice has been removed. Although this development might produce a monopoly gain were the commodities supplied by the railways capable of monopolization; this is so rarely the case that it scarcely merits separate attention. There is no indication that an

exceptional instance can be discovered in the United States. It must be recognized that the general public has followed the recent progress of railway unification, which, under the spur of legislative restraints upon other methods of securing the advantages of centralized control, has been unprecedentedly rapid, with much less discontent than was observed in connection with former movements of much smaller magnitude. Yet some inquiry is natural and desirable, and it seems proper to examine in some detail the probable consequences of the present movement toward centralization.

The plainest teaching of railway history is that consolidation means enhanced efficiency in the broadest sense. This is not only that persons and property will be moved more expeditiously and with greater comfort and safety, but that the charges for railway services will be gradually reduced, and many of the unjust disadvantages to which persons, places and kinds of traffic are subjected by discriminations in favor of traffic for which alternative routes are available will finally be removed. These desirable results will be accomplished to precisely the extent in which the present movement has brought about a degree of harmony and systematization in the railway industry that is adequate to the demands of the current general industrial organization. Discriminations that unjustly favor terminal points will be eliminated in so far as the particular route taken by specific shipments is rendered indifferent to any and all of those interested in the various routes available. If the concentration of railway control has not gone far enough to produce such indifference with regard to any traffic, it will continue to be unduly favored, and other traffic, as well as the persons and places concerned in it, will continue at an unjust disadvantage. Rates will be reduced by the operation of the forces which, as heretofore indicated, keep the return to railway capital on a competitive basis, and the fact that increased stability and decreased risk have been secured

by the diffusion of the possibilities of harm through local industrial disturbances, such as crop failures and strikes, and the protection against occasional instances of destructive inter-line warfare for traffic and the accompanying demoralization of rates and revenues.

The physical improvement of financially weaker lines, after absorption by stronger corporations, has been a marked characteristic of some recent operations, and there have also been numerous instances in which the greater liberality with which the larger companies are able to treat their employees in such matters as wages, hours of labor, and pension and insurance privileges, have after consolidation been extended so as to benefit the employees taken over with the properties on which they formerly served. On the other hand, the consolidation of lines tends to reduce the volume of employment per unit of traffic, in certain lines of railway work and it is as yet impossible to say how far this is offset by the tendency of the lower rates and generally superior efficiency to increase traffic. So far as the number and cost of employees per unit of traffic are reduced, it is evident that the general traveling and shipping public can interpose no objection. Consolidation, like any other labor-saving device, may make necessary some industrial readjustments which, while generally and in the net result beneficial, may operate to the temporary injury of a few. However distressing these readjustments, their sum cannot be so great as the total loss in comparative comfort that would inevitably result from refusal to take advantage of the appliances making them necessary.

A railway of short length, requiring relatively small capital, and subject to all of the vicissitudes of local industries, will interest local capitalists of adventurous disposition, and may attract the capital of the few men who make a business of calculating the prospects of hazardous enterprises of that character. Both classes of investors will demand chances of high returns, but will subject themselves to the possibility

of extensive and even total loss. In an extended series of such undertakings the average return, combining the successful with the unsuccessful, will be relatively high, although this presumption is subject to the qualification that the risks incurred may be generally and grossly underestimated. If, however, several such roads are combined the risks of local industrial difficulties will be distributed, and greater stability for the investments will be secured. Should combination extend so as to include two or more routes connecting the same regions, or offering to supply the same market with competitive products, another kind of risk, that of destructive rate wars, would be eliminated. As every step in the elimination of risk opens the door to the investment of capital one degree more timid than that last admitted, the result is not only to reduce the return demanded by capital, but also to diffuse ownership. Progress in this direction will not, however, bring in many small investors until it has gone far enough to establish a very high degree of stability for the investments. When this has been accomplished small investors will enter the field in large numbers and thus, as the concentration of railway control becomes genuinely effective, it tends strongly toward the diffusion of railway ownership. There is no such incentive to saving as the existence of a well-known, stable and fairly remunerative form of investment. Small local railways could not supply this demand, even if there were not always the extra hazards of local enterprises and rate-cutting, for the number of different securities would too greatly increase the difficulty of acquiring information concerning their respective values. The securities of great railway systems do supply this great economic need, and especially as more reasonable public sentiment withdraws the restraints of unwise legislation will their stability increase and win general recognition. Thus while the process of consolidation may allow those individuals of high economic perception who take the lead in it, rapidly to

accumulate large personal fortunes, which are the payment for the great services they perform in enhancing railway efficiency, it must tend eventually to the diffusion not only of railway ownership, but of wealth in general and to the consequent reduction of the differences between average wealth and the greatest fortunes, on the one hand, and the smallest possessions upon the other. How far this tendency may be offset or exceeded by those in the opposite direction extraneous to the railway industry is another matter.

The personal and financial difficulties now in the way will prevent the present movement proceeding far enough to eliminate all of the evils of independent railway control. This does not mean that economic advantage would result from the consolidation of all American railways under a single management, but merely that it will not now be possible to bring systematization abreast of purely industrial requirements. In fact, it is doubtful, when extra-economic considerations are invoked, whether it would now be desirable to force the organization of the railway system to the point of highest economic convenience. Other social institutions, principally those of a political character, do not appear to be developed sufficiently to bear the strain of adjustment. Indeed, one of the severest criticisms of such legislation as the anti-pooling clause of the Interstate Commerce law and the anti-trust law as applied to railways is that it unduly stimulates and forces the movement toward railway consolidation.

Therefore, while the progress of consolidation remains too slow to attain the point fixed as desirable by the demands of general industry, it will continue to be advisable to utilize the most satisfactory substitutes that are available or can be made so. The best of these is the railway association having power to prescribe rates and methods and to secure the enforcement of both by distributing in fixed proportions the traffic which might be the object of independent offers of rates or privileges. Such distribution almost wholly removes the incentive for seeking business by the methods that pro-

duce unjust discriminations, and interfere with symmetrical industrial development. This substitute is not now available on account of the fifth section of the Interstate Commerce law and the interpretation of the Sherman anti-trust law adopted by the United States Supreme Court. Efforts to render it available and to give legal efficacy to agreements of this character, when filed with the Interstate Commerce Commission and subject to its constant supervision, have so far been unsuccessful on account of the extreme demands of those who wish to subject the business of interstate railways to a very rigid and absolute form of federal control. Those who take this view have frequently attempted to find support for their contentions in the progress toward the concentration of railway control, but so far as their efforts have been subjected to logical scrutiny and analysis they have utterly failed. Railway rates cannot be generally excessive, all railway history proves that they cannot under any circumstances be permanently advanced,¹ and the progress of consolidation always operates to eliminate the defects in the relative adjustment of charges that constitute the real basis of nearly all friction between the railways and their patrons. If, however, it is necessary, in order to legalize methods so essential to railway efficiency as those of association for rate-making and maintenance, that federal control should be extended to details most effectually regulated by commercial forces superior to statutory law, the railways have less to lose than any one else by the introduction of such a radical departure from the best precedents of American industrial legislation. If the changes do not go so far in the direction of legislative interference in industry as to threaten the entire fabric of domestic production and commerce, thus making it incumbent upon those first directly affected to bear the brunt of the struggle necessary to repel an attack of general scope,

¹ The existence of the same distinction between real and nominal rates as between real and nominal wages should be noted, although it does not materially affect the accuracy of this statement.

the railways can well afford to withhold their own opposition.

Few students of industrial history will accede to the proposition that it is safer to trust to the action of a board endowed with authority to compel the rate adjustments which it approves than to the natural processes of adjustment to commercial demands, reinforced in exceptional instances by the investigations and suggestions of competent public authorities, with ample provision for securing complete publicity as a means of invoking sound public sentiment in aid of the just recommendations of these authorities. This is especially the case when it is recognized that to clothe a board with power to enforce its orders, or to secure their enforcement by judicial processes is to deprive its most correct and reasonable conclusions of the support of general public sentiment. When the general public depends confidently upon laws of an arbitrary character it is not sufficiently watchful to permit that general publicity which must be the basis of effective public sentiment.

There are personal and financial obstacles that always impede the movement toward railway consolidation. These, at the present time, seem likely to prevent the immediate continuance of the movement in its recent intensity. The inquiry, how far concentration is eventually to go, is, however, a natural and pertinent one. If all limitations of time are removed, the answer is that industrial necessity will sometime weld all American railways into a single system. At present, however, the tendency is to divide the country into districts, and it is probable that the lines within each of these already clearly defined districts will be united before consolidation of lines belonging to two or more of them are effected. The districts are four in number. One is east of the Mississippi and north of the Potomac and Ohio; a second south of the two rivers last named and east of the Mississippi; a third includes the lines connecting the Pacific Coast with the Mississippi River, and somewhat overlaps a fourth, which embraces the so-called

southwestern lines. The union of the last two districts is not improbable. The newspaper fantasy of a line from the Atlantic to the Pacific under unified management is not likely soon to materialize. Individual operators may invest largely in roads which together might constitute such a line, but under present conditions they will carefully refrain from steps which might imply unified management, especially in traffic matters. To do otherwise would be to invoke inter-line jealousies of destructive force, and to awaken in fearful force the very form of rivalry that current consolidations are intended to avoid.

A broad study of American railway history, and especially of the relations between the railways and those who purchase and are dependent upon their services, with suitable regard for the modifications effected in those relations by the drawing together of the originally separate parts of the railway system, like the study of most phases of industrial development, leads to the conclusion that the tremendous natural forces of industry are always beneficent. It also shows that they are more powerful than political or legal institutions, that they are not subject to legislative control, and that they work best when least opposed. The most good voluntary social action can accomplish is to hasten the natural adjustment between the different kinds of social institutions and to take advantage of natural tendencies in industry by accepting them as inevitable and shaping social policies in accordance with them. To attempt to shackle them is to erect obstacles in the path of industrial progress which, while they cannot be made insurmountable, are very likely to retard it and to be the source of innumerable and unforeseen difficulties.

H. T. NEWCOMB.

The Railway World, Philadelphia.